

Chromatin remodeling in heart development.

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Public Summary:

In this review of the literature I describe the advances in understanding how genes get turned on or off in the formation of the heart.

Scientific Abstract:

Heart development is a complex process that relies on networks of interacting transcription factors. Mutations in genes encoding some of these transcription factors result in many inherited congenital heart defects and point to the importance of these networks. Chromatin remodeling complexes are intimately associated with these transcriptional networks, adding an additional layer of complexity and fine-tuning to the regulation of heart development. Understanding these relationships will be crucial to understand fundamental concepts in tissue-specific gene regulation in organogenesis, in unraveling the mechanisms of congenital heart disease, as well as providing new avenues for reprogramming new cardiomyocytes for heart repair.

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